**IT Applications Unit 3, AOS 2, Organisations and Data Management**

**Database Design Tools, p 106**

**Naming Conventions**

1. List the naming conventions that can be applied to a database.

Every field and object within a database is name properly so that it can be easily identified by the developer or user.

**Entity-Relationship Diagram, (ERD)**

1. Describe the nature of these diagrams.

An ERD is used by database designers to establish the interrelationships between different data elements.

1. Draw the symbols used to represent, entities, relationships and attributes.

Boxes to represent entities

Diamonds to represent relationships

Ovals to represent attributes of entities

1. List the three steps to create an ERD.

First identify the entities, secondary define the relationships and thirdly add the attributes to each entity.

**Data Structure Table**

1. draw a diagram of the data structure table which is used to design a new database.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Field | Data type | Field size | Input mask | Caption | Description | Validation rule | Validation text |
| cliclientid | Text | 4 |  | Client id no. | Client’s individual assigned code | Between 1000 and 9999 | Client id numerer must be between 1000 and 9999 inclusive |
| cliLastName | text | 30 |  | Last name | Clients last name |  |  |
| cliFirstName | Text | 30 |  | First name | Clients last name |  |  |

1. Note: database tables cannot hold formulas.

**Data Structure diagram**

1. What is the purpose of this diagram?

Is to indicate the relationship that exist between the specific tables of the planed database so developer will know how the tables ought to be linked.

**Query Design**

1. what is a query?

To filter out only those records that meet the query criteria.

1. Distinguish between a primary and a secondary sort

Primary sort is the sort first completed and the secondary sort follows that.

1. Read the query criteria that can be used, including symbols, plain text, \*? Wildcards, etc.

Done

**Layout diagram**

1. What does a layout diagram involve?

It involves sketching what an input form or the output of the solution will look like.

1. List what is contained on a layout diagram.

It contains

* Headings
* Labels
* Fields

**Test Data**

1. When is a set of test data prepared?

In the design stage that will be used during development to ensure that solution is functioning correctly.

1. What is the role of the test data?

To ensure that solution is functioning correctly.

**Validating data**

1. List the available electronic validation checks in the software.

Hello not sure

1. What is an input mask?

An input mask can also be used to reduce the chance that invalid data is entered.